

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. Applicant's undersigned attorney would also like to thank the Examiner for taking the time to conduct a telephone interview on the present application. It is believed that the opportunity to discuss the application and the cited art has been of mutual benefit to the undersigned and the Examiner, and has helped to resolve some of the outstanding issues in this case.

The drawings have been objected to for failing to show processing two or more groups of work pieces. The claims have been amended to define that first and second work pieces are processed, and thereby remove the Examiner's grounds for objection. Reconsideration and withdrawal of the drawing objections is requested.

Claims 36 and 37 have been rejected as being indefinite. These claims have been amended as suggested by the Examiner in the Office action, and thereby remove the Examiner's grounds for objection. Reconsideration and withdrawal of the formal objections to claims 36 and 37 is requested.

In the final Office action, claims 25-33 were rejected as being unpatentable over US 3,982,739 to Maes, and claims 32, 33, 35 and 36 were rejected as being unpatentable over Maes in view of US 2,019,789 to Mahannah. Although the claims have been significantly amended by the present preliminary amendment, the prior rejections will be addressed hereinafter.

The present invention is directed toward a method of processing first and second work pieces. In accordance with the claimed method, a work piece location is provided, and a plurality of clamp devices are positioned around the work piece

location so as to clamp the first and second work pieces at different clamping sites.

Each of the clamp devices includes a lower clamp unit and an upper clamp unit.

The lower clamp units include a pair of lower jaws and the upper clamp units include a pair of upper jaws. Each of the upper and lower jaws has a distal end and a proximal end. The distal ends engage the work piece. At least one of the lower jaws is pivotally mounted at its proximal end so as to pivot about an axis between a clamped position and an unclamped position. One of the upper jaws is pivotally mounted at its proximal end so as to pivot about an axis between a clamped position and an unclamped position, while the other of the upper jaws is mounted to the pivotally mounted lower jaw for travel therewith.

With regard to the lower jaws, the pivotally mounted lower jaw is actuated so as to separate the adjacent distal ends of the lower jaws of each lower clamp unit in order for the lower clamp units to receive the first work piece, and then is actuated so as to clamp the distal ends of the adjacent lower jaws of each lower clamp unit against a corresponding location near a peripheral region of the first work piece at a first elevation. With regard to the upper jaws, one upper jaw is actuated so as to separate the adjacent distal ends of the upper jaws of each upper clamp unit in order for the upper clamp units to receive of the second work piece, and then is actuated so as to clamp the distal ends of the adjacent upper jaws of each upper clamp unit against a corresponding location near a peripheral region of each of the second work piece at a second elevation. The second elevation is relatively higher than the first elevation.

It is respectfully submitted that the Maes patent is directed toward a portable vise having a completely different method of operation than that of the presently

claimed invention. More specifically, Maes is directed toward a vice having upper and lower clamp portions 11, upper and lower set screws 13, and an X-shaped plate 1, 2 disposed between the upper and lower clamp portions 11. The set screws 13 force a bar into clamping engagement with an associated portion of the X-shaped plate 1, 2.

With reference to claim 25, Maes does not teach or suggest the step of "providing the lower clamp unit of each clamp device with a pair of lower jaws, each lower jaw having a distal end for engaging a work piece and a proximal end, at least one of the lower jaws being pivotally mounted near its proximal end for rotational movement about a first pivot axis relative to the other of the lower jaws between a clamped position and an unclamped position", as required. Rather, Maes only teaches a set screw that is turned or threaded so as to advance or retract relative to the clamped article. With regard to the X-shaped plate, which the bar is clamped against, there is no reasonable interpretation of this plate that would lead one to conclude that it has a proximal and distal end, as required. It is respectfully submitted that the foregoing argument also applies to the claimed 'upper clamp unit', and will not be repeated hereinafter.

With continued reference to claim 25, Maes does not teach or suggest "mounting the other of the upper jaws on the pivotally mounted lower jaw for travel therewith", as required. Maes has no structure that is equivalent to the claimed mounting of one of the upper jaws on the pivotally mounted lower jaw.

For at least the foregoing reasons, it is submitted that Maes does not anticipate amended claim 25, Reconsideration and withdrawal of the rejections of claims 25-33 based upon Maes is requested.

With reference to the rejection of claims 32, 33, 35 and 36 based upon the combination of Maes and Manahan, it is respectfully submitted that even if the references were combined, the invention defined in claim 25, from which claims 32, 33, 35 and 36 depend, would not result.

Neither of the cited references, either alone or in combination, teach the step of "mounting the other of the upper jaws on the pivotally mounted lower jaw for travel therewith", as required. It is noted that Manahan only teaches a single clamp assembly, and therefore cannot be cited as teaching mounting one of the upper jaws (of a pair of upper jaws) to one of the lower jaws (of a pair of lower jaws), as required by claim 25.

With regard to the Examiner's proposal to use the Manahan pivoting arm assembly in place of the rigid attachment disclosed in Maes (as shown in Fig. 2), it is submitted that there is no suggestion or motivation to lead one skilled in the art to make such a substitution. Since Maes is directed toward a portable vice in which a rigid support is required, using the flexible and adjustable arm assembly of Manahan would not be desirable, and would not be employed by one skilled in the art as it would defeat the purpose of the Maes assembly. Moreover, even if the Manahan pivoting arm assembly were used in place of the rigid mount of Maes, the presently claimed invention would not result. Rather, insofar as the Maes clamp portion 11 is attached to the x-shaped plate 1, 2 so as to form an assembly that moves together as a single unit, movement of the X-shaped plate, such as through a pivoting arm assembly, will cause the entire clamping assembly to move. In other words, the X-shaped plate cannot move relative to the upper and lower clamp portions 11. Thus, even if combined with Manahan, there is no way for the combination to be

interpreted such that one of the upper jaws is mounted to a pivoting one of the lower jaws.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

RESPONSE TO REQUEST FOR FURTHER INFORMATION

With reference to the questions posed in the final Office action, applicant responds as follows:

a) Was the claimed method in use solely by the applicant?

Answer: Yes, based upon information and belief of the applicant.

b) When was the claimed method or apparatus used to practice the method first in use?

Answer: Applicant first used the claimed method in production on or after June 28, 2001.

b-iv) Is there any documentation (published or unpublished) of the first use?

Answer: Based upon information and belief of the applicant, there is no published documentation of first use. As the invention was used in a manufacturing environment, production records may have been retained that would,

if available, serve as evidence of first use on or after June 28, 2001.

c) Was applicant the sole inventor of the claimed invention?

Answer: Yes, based upon information and belief of the applicant.

d) Has there been any attempt to obtain a patent or has a patent been obtained for the claimed invention in any other country:

Answer: Yes, copending corresponding applications have been filed in Canada, Great Britain, and Japan.

d-v.) If yes, when?

Answer: Canada: June 27, 2003;
Great Britain: June 26, 2003; and,
Japan: June 27, 2003

d-vi.) If yes, by who?

Answer: HONDA CANADA INC.

e) Has there been any sale or offer of sale of the claimed method or the apparatus used to practice the method by applicant or others?

Answer: No. Applicant has used the method and the apparatus in a production setting, and has sold products made utilizing the claimed method and apparatus of the invention, but has not sold the method or the device for carrying out the method.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. GAS-14134US1.

Respectfully submitted,

RANKIN, HILL, PORTER & CLARK LLP

By 
David E. Spaw, Reg. No. 34732

4080 Erie Street
Willoughby, Ohio 44094-7836
(216) 566-9700